

Verb particles in Dutch

Transfer rules:
As an example the verb "af+wijzen" which is a transitive verb

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{VP=TRANS,1}
VP::VP : [VERB NP] -> [VERB NP]
(
  (x1::y1)
  (x2::y2)

  ((x1 verbparticle) = *UNDEFINED*)

  (x0=x1)
)

{VP=TRANS,2}
VP::VP : [VERB NP VERBPART] -> [VERB NP]
(
  (x1::y1)
  (x2::y2)

  ((x1 verbparticle) =c (x3 verbparticle))

  (x0=x1)
)

VERBPART::VERBPART |: ["af"] -> [""]
(
  (x1::y1)

  ((x0 verbparticle) = af)
)

VERB::VERB |: ["wijzen"] -> ["reject"]
(
  (x1::y1)

  ((x0 verbparticle) = af)
)
```

So all rules with the verbparticles require to have the right particle, while all other verb rules require to be "empty"

Basic test:			
Dutch	gloss	output	correct
ik haal de auto in	i get the car in	i overtake the car	√
ik haal de auto	i get the car	i get the car	√
Test with negation:			
ik haal de auto niet in	i get the car not in	i do not overtake the car	√
ik haal de auto niet	i get the car not	i do not get the car, i get the car not	overgenerates
Test with a really long dependancy zit+voor chair:			
ik zit de vergadering van de europese unie voor het volk voor	i sit the meeting of the european unie for the people before	i chair the meeting of the european union for the people (and 954 other translations, but all with "i chair")	√
Trying ditransitive			
ik geef hem zijn boek terug	i give him his book back	i return him his book	√
split verb particle "door elkaar"+halen			
ik haal de europese unie met de amerikaanse staat door elkaar	I get the european unie with the american state through eachother	i confuse the european union with the american state (and 62 other translations, sentence over generates, has 2 parses)	overgenerates

List of added verb+particles

in-halen (in+get)	<->	overtake
door-gaan (through+go)	<->	continue
toe-treden (to+step)	<->	join (as in become a member)
goed-keuren (goed+check)	<->	approve
vast-stellen (fixed+declare)	<->	note (as in observe)
voor-stellen (pro+declare)	<->	propose
aan-stippen (on+"making-dots")	<->	note (as in emphasize)
mee-maken (with+make)	<->	experience
in-stemmen (in+vote)	<->	support, approve
toe-spreken (to+speak)	<->	address
toe-kennen (to+recognise)	<->	allocate, grant, give
in-zien (in+see)	<->	realise, see
toe-nemen (to+take)	<->	increase
over-nemen (over+take)	<->	adopt
toe-zien (to+see)	<->	ensure, monitor, enforce
voort-zetten (onwards+put)	<->	continue (formal)
voor-zitten (before+sit)	<->	chair (lead a meeting)
uit-vallen (out+fall)	<->	appear (lit. stop functioning, but in text it always appears in kind of a proverbial way)
in-voeren (in+feed)	<->	introduce
toe-staan (to+stay)	<->	allow
geluk-wensen (luck+wish)	<->	congratulate
eens-zijn (once+be)	<->	agree (the origine is once as in "the same" (opinion), i guess)
in-zetten (in+put)	<->	involve, take part
uit-voeren (out+feed)	<->	execute
over-laten (over+leave)	<->	leave (like in left-over)
in-dienen (in+serve)	<->	introduce, submit
invloed-uit-oefenen (influence+out+serve)	<->	influence
druk-uit-oefenen (pressue+out+serve)	<->	press
plaats-vinden (place+find)	<->	happen, occur
bij-dragen (by+carry)	<->	contribute
toe-voegen (till+"join")	<->	add
akkoord-gaan (accord+go)	<->	approve, agree
terug-vinden (find+back)	<->	find
op-richten (op+raise)	<->	found, create, establish
af-stemmen (off+vote)	<->	coordinate
mee-doen (with+do)	<->	participate
af-wijzen (off+point)	<->	reject
te berde-brengen (+bring (archaic dutch))	<->	raise (raise a point)
aan-leren (on-teach/learn)	<->	learn
op-leveren (up+deliver)	<->	yield, produce
te weten-komen (to knowledge+come)	<->	find out
door elkaar-halen (through eachother+get)	<->	confuse, mix up
voor elkaar-krijgen (before eachother+receive)	<->	achieve
ongedaan-maken (undone+make)	<->	undo
op-nemen (up+take)	<->	include
deel uit-maken (out+make)	<->	form part
op-heffen (up+lift)	<->	lift (end something as in close a meeting)
op-stellen (up+declare)	<->	draw up
samen-hangen (together+hang)	<->	be connected
het risico-lopen (the risc-walk)	<->	be in danger
nodig-hebben (necessary-have)	<->	need
erop-wijzen (there-up-point)	<->	emphasize
bijdrage-leveren (contribution+deliver)	<->	contribute (formal)
samen-gaan (together+go)	<->	unite
samen-smelten (together+melt)	<->	fuse, combine
terug-geven (back+give)	<->	return (items)
voor-zitten (before+sit)	<->	chair (a meeting)